

1631

RAW SEQUENCE LISTING DATE: 05/05/2000  
 PATENT APPLICATION: US/09/132,231A TIME: 14:04:12

Input Set : A:\PTO.txt  
 Output Set: N:\CRF3\05052000\I132231A.raw

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5 <110> APPLICANT: HORWITZ, Marshall S.  
 7 <120> LOEB, Lawrence A.  
 11 <130> TITLE OF INVENTION: METHOD FOR PRODUCING NOVEL DNA SEQUENCES WITH  
 13 <140> BIOLOGICAL ACTIVITY  
 17 <150> FILE REFERENCE: 032425-001  
 21 <140> CURRENT APPLICATION NUMBER: 09/132,231A  
 23 <141> CURRENT FILING DATE: 1998-08-11  
 27 <150> PRIOR APPLICATION NUMBER: US 08/316,415  
 29 <151> PRIOR FILING DATE: 1994-09-30  
 33 <160> NUMBER OF SEQ ID NOS: 57  
 37 <170> SOFTWARE: PatentIn Ver. 2.0  
 11 <210> SEQ ID NO: 1  
 13 <211> LENGTH: 17  
 15 <212> TYPE: DNA  
 48 <213> ORGANISM: Escherichia coli  
 52 <220> FEATURE  
 54 <221> NAME/KEY: misc\_difference  
 56 <222> LOCATION: (1)..(9)  
 58 <223> OTHER INFORMATION: Nucleotide at position 9 is n wherein n = a, c, g,  
 60 or t.  
 64 <400> SEQUENCE: 1  
 66 ccgaattcna tcgatcc 17  
 72 <210> SEQ ID NO: 2  
 74 <211> LENGTH: 17  
 76 <212> TYPE: DNA  
 78 <213> ORGANISM: Escherichia coli  
 82 <220> FEATURE  
 84 <221> NAME/KEY: misc\_feature  
 86 <222> LOCATION: (1)..(9)  
 88 <223> OTHER INFORMATION: Nucleotide at position 9 is n wherein n = c, g, or  
 90 t.  
 94 <400> SEQUENCE: 2  
 96 ccgaattcna tcgatcc 17  
 102 <210> SEQ ID NO: 3  
 104 <211> LENGTH: 11  
 106 <212> TYPE: DNA  
 108 <213> ORGANISM: Escherichia coli  
 112 <400> SEQUENCE: 3  
 114 tacggtggtt t 11  
 120 <210> SEQ ID NO: 4  
 122 <211> LENGTH: 26  
 124 <212> TYPE: DNA  
 126 <213> ORGANISM: Escherichia coli  
 128 <400> SEQUENCE: 4  
 132 aattcttggg cagcggtgg ctgat 26  
 138 <210> SEQ ID NO: 5  
 140 <211> LENGTH: 21

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142 <212> TYPE: DNA  
144 <213> ORGANISM: Escherichia coli  
146 <400> SEQUENCE: 5  
150 agatcaaggg gacgcgcgcgc caag 24  
156 <210> SEQ ID NO: 6  
158 <211> LENGTH: 20  
160 <212> TYPE: DNA  
162 <213> ORGANISM: Escherichia coli  
164 <400> SEQUENCE: 6  
168 tttctgggtg catactcttc 20  
174 <210> SEQ ID NO: 7  
176 <211> LENGTH: 26  
178 <212> TYPE: DNA  
180 <213> ORGANISM: Escherichia coli  
182 <400> SEQUENCE: 7  
186 tttctgggtg agacctcata ctcttc 26  
192 <210> SEQ ID NO: 8  
194 <211> LENGTH: 20  
196 <212> TYPE: DNA  
198 <213> ORGANISM: Escherichia coli  
200 <220> FEATURE  
202 <221> NAME/KEY: misc\_feature  
204 <222> LOCATION: (1)..(11)  
206 <223> OTHER INFORMATION: Nucleotide at position 11 is n wherein n = a, c,  
210 g, or t  
212 <400> SEQUENCE: 8  
216 ggggagatct nagatctggg 20  
222 <210> SEQ ID NO: 9  
224 <211> LENGTH: 10  
226 <212> TYPE: DNA  
228 <213> ORGANISM: Escherichia coli  
230 <400> SEQUENCE: 9  
234 ccccagatct 10  
240 <210> SEQ ID NO: 10  
242 <211> LENGTH: 47  
244 <212> TYPE: DNA  
246 <213> ORGANISM: Escherichia coli  
250 <220> FEATURE  
252 <221> NAME/KEY: misc\_feature  
254 <222> LOCATION: (16)..(38)  
256 <223> OTHER INFORMATION: Nucleotides 16 to 38 are n wherein n = unspecified  
258 bases  
262 <400> SEQUENCE: 10  
264 cgccccgagg aacgtnnnnn nnnnnnnnnn nnnnnnnnag tactgct 47  
270 <210> SEQ ID NO: 11  
272 <211> LENGTH: 46  
274 <212> TYPE: DNA  
276 <213> ORGANISM: Escherichia coli  
280 <220> FEATURE

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282 <221> NAME/KEY: misc\_feature  
284 <222> LOCATION: (13)..(26)  
286 <223> OTHER INFORMATION: Nucleotides 18 to 26 are n wherein n = unspecified  
288 bases.  
292 <224> FEATURE:  
294 <221> NAME/KEY: misc\_feature  
296 <222> LOCATION: (30)..(35)  
298 <223> OTHER INFORMATION: Nucleotides 30 to 35 are n wherein n = unspecified  
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304 <400> SEQUENCE: 11  
306 *cgccccagga acgtttttnnn nnnnnnagcn nnnnnaaagt actgct* 46  
312 <210> SEQ ID NO: 12  
314 <211> LENGTH 47  
316 <212> TYPE: DNA  
318 <213> ORGANISM: Escherichia coli  
322 <400> SEQUENCE: 12  
324 *cgccccagga acgtttttcc cgtcatgagc atcatcaaaag tactgct* 47  
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332 <211> LENGTH 57  
334 <212> TYPE: DNA  
336 <213> ORGANISM: Escherichia coli  
340 <400> SEQUENCE: 13  
342 *caagaaattt catgttttgc agcttatcat cagataagctt taatcgaggta gttttatc* 57  
348 <210> SEQ ID NO: 14  
350 <211> LENGTH 57  
352 <212> TYPE: DNA  
354 <213> ORGANISM: Escherichia coli  
358 <400> SEQUENCE: 11  
360 *tttcttaara gtacaaactg tcgaatagta gctattcgaa attacgccat caaatag* 57  
366 <210> SEQ ID NO: 15  
368 <211> LENGTH 19  
370 <212> TYPE: DNA  
372 <213> ORGANISM: Escherichia coli  
376 <224> FEATURE:  
378 <221> NAME/KEY: misc\_feature  
380 <222> LOCATION: (1)..(15)  
382 <223> OTHER INFORMATION: Nucleotides 1 to 19 are n wherein n = unspecified  
384 bases.  
388 <400> SEQUENCE: 15  
390 *nnnnnnnnnn nnnnnnnnn* 19  
396 <210> SEQ ID NO: 16  
398 <211> LENGTH: 40  
400 <212> TYPE: DNA  
402 <213> ORGANISM: Escherichia coli  
406 <400> SEQUENCE: 16  
408 *tttcatggtt taacagetta tcacgataa gctttaatgc* 40  
414 <210> SEQ ID NO: 17  
416 <211> LENGTH: 40  
418 <212> TYPE: DNA

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421 <400> SEQUENCE: 17
425 gtgaggaac gccacagggg aaagaactgc gccttgacat 40
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433 <211> LENGTH: 16
436 <212> TYPE: DNA
438 <213> ORGANISM: Escherichia coli
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441 ggaacacacg atacgt 16
450 <210> SEQ ID NO: 19
452 <211> LENGTH: 19
454 <212> TYPE: DNA
456 <213> ORGANISM: Escherichia coli
460 <400> SEQUENCE: 19
462 agacagggg ggcacacat 19
469 <210> SEQ ID NO: 20
470 <211> LENGTH: 12
472 <212> TYPE: DNA
474 <213> ORGANISM: Escherichia coli
478 <400> SEQUENCE: 20
480 cccatgcaaa ta 12
486 <210> SEQ ID NO: 21
488 <211> LENGTH: 10
490 <212> TYPE: DNA
492 <213> ORGANISM: Escherichia coli
496 <400> SEQUENCE: 21
498 ttccggtac 10
501 <210> SEQ ID NO: 22
503 <211> LENGTH: 22
508 <212> TYPE: DNA
510 <213> ORGANISM: Escherichia coli
514 <400> SEQUENCE: 22
516 tctagggcgc gcctcgctt ga 22
522 <210> SEQ ID NO: 23
524 <211> LENGTH: 18
526 <212> TYPE: DNA
528 <213> ORGANISM: Escherichia coli
532 <400> SEQUENCE: 23
534 gcccttttc tcccttga 18
540 <210> SEQ ID NO: 24
542 <211> LENGTH: 23
544 <212> TYPE: DNA
546 <213> ORGANISM: Escherichia coli
550 <400> SEQUENCE: 24
552 cgtccctgac ttacgtttt tcc 23
558 <210> SEQ ID NO: 25
560 <211> LENGTH: 25
562 <212> TYPE: DNA
564 <213> ORGANISM: Escherichia coli
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568 <400> SEQUENCE: 25
570 ggcgtgtggat cccgctgtct ctcca
576 <210> SEQ ID NO: 26
578 <211> LENGTH: 19
580 <212> TYPE: DNA
582 <213> ORGANISM: Escherichia coli
584 <400> SEQUENCE: 26
586 cctggcgcgc gtagctttc
591 <210> SEQ ID NO: 27
596 <211> LENGTH: 19
598 <212> TYPE: DNA
600 <213> ORGANISM: Escherichia coli
601 <400> SEQUENCE: 27
603 attcgggttg cggcgtagc
612 <210> SEQ ID NO: 28
614 <211> LENGTH: 19
616 <212> TYPE: DNA
618 <213> ORGANISM: Escherichia coli
622 <400> SEQUENCE: 28
624 cagtaggcgc ccatatcga
633 <210> SEQ ID NO: 29
636 <211> LENGTH: 19
638 <212> TYPE: DNA
640 <213> ORGANISM: Escherichia coli
640 <400> SEQUENCE: 29
642 agcgagtcct cccatcatt
648 <210> SEQ ID NO: 30
650 <211> LENGTH: 15
652 <212> TYPE: DNA
654 <213> ORGANISM: Escherichia coli
656 <400> SEQUENCE: 30
658 gacgatggcg gcgcgc
666 <210> SEQ ID NO: 31
668 <211> LENGTH: 29
670 <212> TYPE: DNA
672 <213> ORGANISM: Escherichia coli
676 <400> SEQUENCE: 31
678 gcccttgctt tggtagtctt gctcgcccc
684 <210> SEQ ID NO: 32
686 <211> LENGTH: 26
688 <212> TYPE: DNA
690 <213> ORGANISM: Escherichia coli
694 <400> SEQUENCE: 32
696 tcttcggctg gccttcgggc gagagt
702 <210> SEQ ID NO: 33
704 <211> LENGTH: 19
706 <212> TYPE: DNA
708 <213> ORGANISM: Escherichia coli
712 <400> SEQUENCE: 33
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VERIFICATION SUMMARY

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L:66 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
 L:96 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
 L:216 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
 L:264 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10  
 L:306 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11  
 L:390 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15  
 L:462 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35  
 L:792 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36  
 L:822 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37  
 L:852 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38  
 L:882 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.